



**In re Applicant:**

Alexei SHIR et al

Serial No.: 10/535,189

Filed: September 21, 2006

For: TARGETED DOUBLE STRANDED RNA  
MEDIATED CELL KILLING

Examiner: GIBBS, TERRA C

**Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

Group Art Unit: 1635

Attorney  
Docket: 29770

## INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a PTO Form 1449 which lists citations which may be material to the patentability and examination of the above identified application. Also enclosed are copies of the references cited. These are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. The Examiner is requested to make these citations of official record in this application.

This Information Disclosure Statement under 37 CFR 1.56 is not to be construed as a representation that a search has been made, that additional matter which is material to the examination of this application does not exist, or that any or more of these citations constitutes prior art.

Respectfully submitted,

Martini C. Kozubki

**Martin D. Moynihan**  
Registration No. 40,338

**Dated: January 31, 2007**

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				Application Number	10/535,189
				Filing Date	September 21, 2006
				First Named Inventor	Alexei SHIR et al
				Group Art Unit	1635
				Examiner Name	GIBBS, TERRA C
Sheet	2	of	4	Attorney Docket Number	29770
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
	3	Ogris et al. "DNA/Polyethylenimine Transfection Particles: Influence of Ligands, Polymer Size, and PEGylation on Internatization and Gene Expression", AAPS PharmSci 3(3): Article 21: 1-11, 2001.			
	4	Sosnowski et al. "Targeting DNA to Cells with Basic Fibroblast Growth Factor (FGF2)", Journal of Biological Chemistry 271(52): 33647-33653, 1996.			
	5	Xu et al. "The Contribution of Poly-L-Lysine, Epidermal Growth Factor and Streptavidin to EGF/PLL/DNA Polyplex Formation", Gene Therapy 5: 1235-1243, 1998.			
	6	Shir et al. "Efficient Killing of Glioblastoma and Other Cancers by Cancer Specific Transfection of dsRNA"			
	7	Shir et al. "Inhibition of Glioma Growth by Tumor-Specific Activation of Double-Stranded RNA-Dependent Protein Kinase PKR", Nature Biotechnology 20(9): 895-900, 2002. Abstract.			
	8	Merdan et al. "Prospects for Cationic Polymers in Gene and Oligonucleotide Therapy Against Cancer", Advanced Drug Delivery Reviews, 54(5): 715-758, 2002.			
	9	Blessing et al. "Different Strategies for Formation of PEGylated EGF-Conjugated PEI/DNA Complexes for Targeted Gene Delivery", Bioconjugate Chemistry, 12(4): 529-537, 2001. Abstract.			
	10	Bettinger et al. "Peptide-Mediated RNA Delivery: A Novel Approach for Enhanced Transfection of Primary and Post-Mitotic Cells", Nucleic Acids Research, 29(18): 3882-3891, 2001. Abstract.			
	11	Liu et al. "Double-Stranded Ribonucleic Acid (RNA) Induces $\beta$ -Cell Fas Messenger RNA Expression and Increases Cytokine-Induced $\beta$ -Cell Apoptosis", Endocrinology, 142(6): 2593-2599, 2001. Abstract.			
	12	Shir et al. "EGF Receptor-Targeted Synthetic Double-Stranded RNA Eliminates Glioblastoma, Breast Cancer, and Adenocarcinoma Tumors in Mice", PLoS Medicine, 3(1/e6): 0125-0135, 2006.			
	13	Bansal et al. "Gene Therapy for Brain Tumors", Current Oncology Reports, 2: 463-472, 2000.			
	14	Bukrinsky et al. "A Nuclear Localization Signal Within HIV-1 Matrix Protein That Governs Infection of Non-Diving Cells", Nature, 365: 666-669, 1993.			
	15	Eriksdotter Joenhagen "Intracerebroventricular Infusion of Nerve Growth Factor in Three Patients With Alzheimer's Disease", Dementia and Geriatric Cognitive Disorders, 9: 246-257, 1998.			
	16	Farrell et al. "Interferon Action: Two Distinct Pathways for Inhibition of Protein Synthesis by Double-Stranded RNA", Proc. Natl. Acad. Sci. USA, 75(12): 5893-5897, 1978.			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	17	Gallay et al. "HIV Nuclear Import Is Governed by the Phosphotyrosine-Mediated Binding of Matrix to the Core Domain of Integrase", Cell, 83: 569-576, 1995.			
	18	George "Platelet-Derived Growth Factor Receptors: A Therapeutic Target in Solid Tumors", Seminars in Oncology, 28(5/Suppl.17): 27-33, 2001.			
	19	Giles "The Vascular Endothelial Growth Factor (VEGF) Signaling Pathway: A Therapeutic Target in Patients With Hematologic Malignancies", The Oncologist, 6(Suppl.5): 32-39, 2001.			
	20	Iordanov et al. "Activation of P38 Mitogen-Activated Protein Kinase and C-Jun NH2-Terminal Kinase by Double-Stranded RNA and Encephalomyocarditis Virus: Involvement of RNase L, Protein Kinase R, and Alternative Pathways", Molecular and Cellular Biology, 20(2): 617-627, 2000.			
	21	Jagus et al. "PKR, Apoptosis and Cancer", The International Journal of Biochemistry & Cell Biology, 31: 123-138, 1999.			
	22	Kim et al. "Epidermal Growth Factor Receptor Biology", Current Opinion in Oncology, 13(6): 506-513, 2001.			
	23	Lappi "Tumor Targeting Through Fibroblast Growth Factor Receptors", Seminars in Cancer Biology, 6: 279-288, 1995.			
	24	Nagane et al. "Drug Resistance of Human Glioblastoma Cells Conferred by A Tumor-Specific Mutant Epidermal Growth Factor Receptor Through Modulation of Bcl-XL and Caspase-3-Like Proteases", Proc. Natl. acad. Sci. USA, 95: 5724-5729, 1998.			
	25	Nakamura et al. "Effect of Interferon Inducer (Poly ICLC) in the Treatment of Malignant Brain Tumor", No To Shinkei, 34(3): 267-273, 1982. Abstract. Article in Japanese. Abstract in English.			
	26	Nishikawa et al. "A Mutant Epidermal Growth Factor Receptor Common in Human Glioma Confers Enhanced Tumorigenicity", Proc. Natl. Acad. Sci. USA, 91: 7727-7731, 1994.			
	27	Player et al. "The 2-5A System: Modulation of Viral and Cellular Processes Through Acceleration of RNA Degradation", Pharmacological Therapy, 78(2): 55-113, 1998.			
	28	Rosen "Angiogenesis Inhibition in Solid Tumors", Cancer Journal, 7(Suppl.3): 120-128, 2001.			
	29	Salazar et al. "Long-Term Treatment of malignant Gliomas With Intramuscularly Administered Polyinosinic-Polycytidylic Acid Stabilized With Polylysine and Carboxymethylcellulose: An Open Pilot Study", Congress of Neurological Surgeons, 38(6): 1096-1104, 1996.			

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